

# Technology and Hawaii's Independent Physician:

## *From EMR / EHR and Meaningful Use to Transformation*



### ***Presentation for the Honolulu Subarea Health Planning Council***

Carl Barton, Director of Business Development

Electronic Health Records • Practice Management Systems  
Clinical Quality Solution • ePrescribing • Medical Billing Services

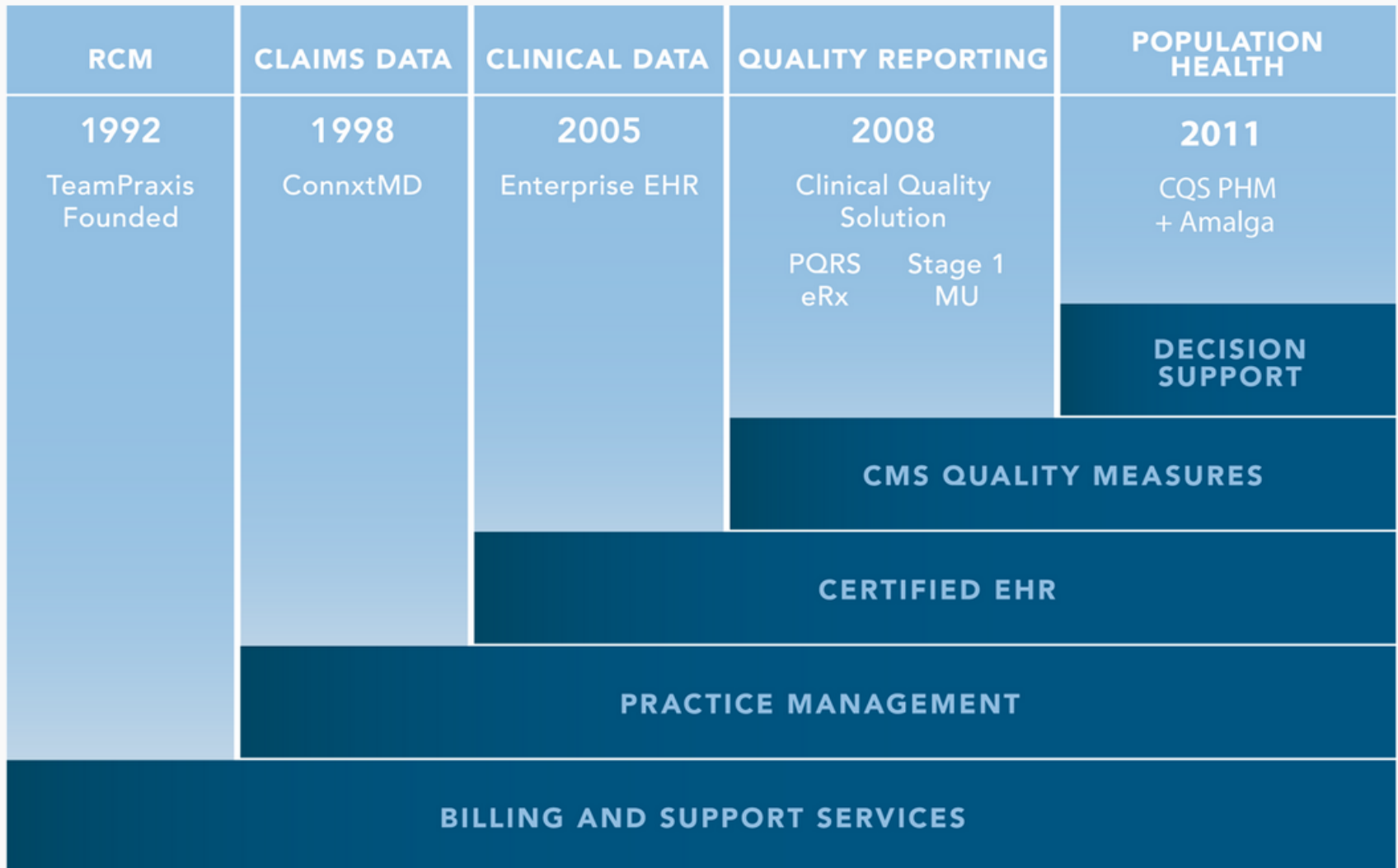
*Healthcare is changing, don't get left behind.*

808.948.9343 • [www.teampraxis.com](http://www.teampraxis.com)

# About TeamPraxis

- Established in 1992, current staff of over 150 FTE
  - Practice Management - Revenue Cycle Management
  - Hawaii's leading EHR provider since 2005
  - Software Development
- Serving more than 1,000 providers in Hawaii
- Clinical Quality Solution (CQS) launched in 2007
- CMS PQRS Registry since 2008
- CQS is in use by 15,000 providers at 85 different sites

# TeamPraxis Timeline



# About Allscripts

- Leader in software, information and connectivity solutions that empower physicians
- Allscripts the Largest Client Network in Healthcare
  - 180,000 physicians
  - 50,000 practices
  - 1,500 hospitals
  - 10,000 post acute facilities



# Overview

- Nationwide and Hawaii healthcare trends
- CQS – PHM & Qualifying Therapeutic Discovery Project Grant
- Hawaii's Independent Physicians

# Nationwide and Hawaii Healthcare Trends

# HealthLeaders Media 2012 Industry Survey

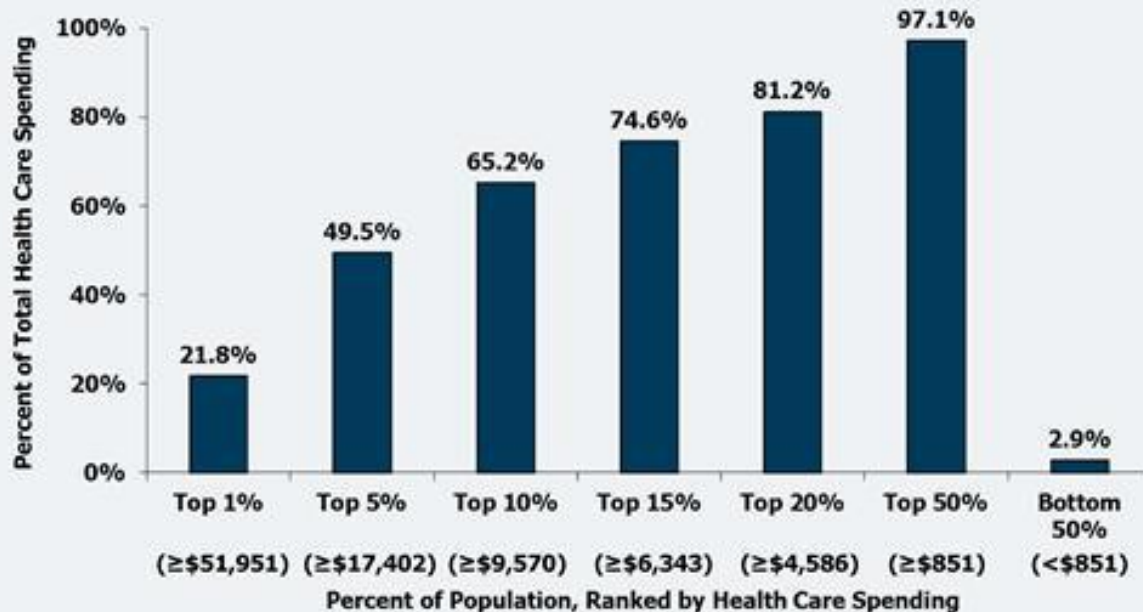
## Organization's top priorities for next 3 years

- Patient Experience and Satisfaction
- Clinical Quality, Safety
- Cost Reduction, process improvement
- Payment Reform, reimbursement (VBP, accountable care)
- Physician-hospital alignment
- Technology (IT, EMR, clinical technology)

Source: [http://www.healthleadersmedia.com/pdf/survey\\_project/2012/Overall\\_Cross-Sector\\_2012\\_f.pdf](http://www.healthleadersmedia.com/pdf/survey_project/2012/Overall_Cross-Sector_2012_f.pdf)

# Distribution of Healthcare Costs

## Concentration of Health Care Spending in the U.S. Population, 2009



Note: Dollar amounts in parentheses are the annual expenses per person in each percentile. Population is the civilian noninstitutionalized population, including those without any health care spending. Health care spending is total payments from all sources (including direct payments from individuals and families, private insurance, Medicare, Medicaid, and miscellaneous other sources) to hospitals, physicians, other providers (including dental care), and pharmacies; health insurance premiums are not included.

Source: Kaiser Family Foundation calculations using data from U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey (MEPS), Household Component, 2009.



Source: Kaiser Family Foundation ([www.kff.org](http://www.kff.org))



# Multiple Chronic Conditions

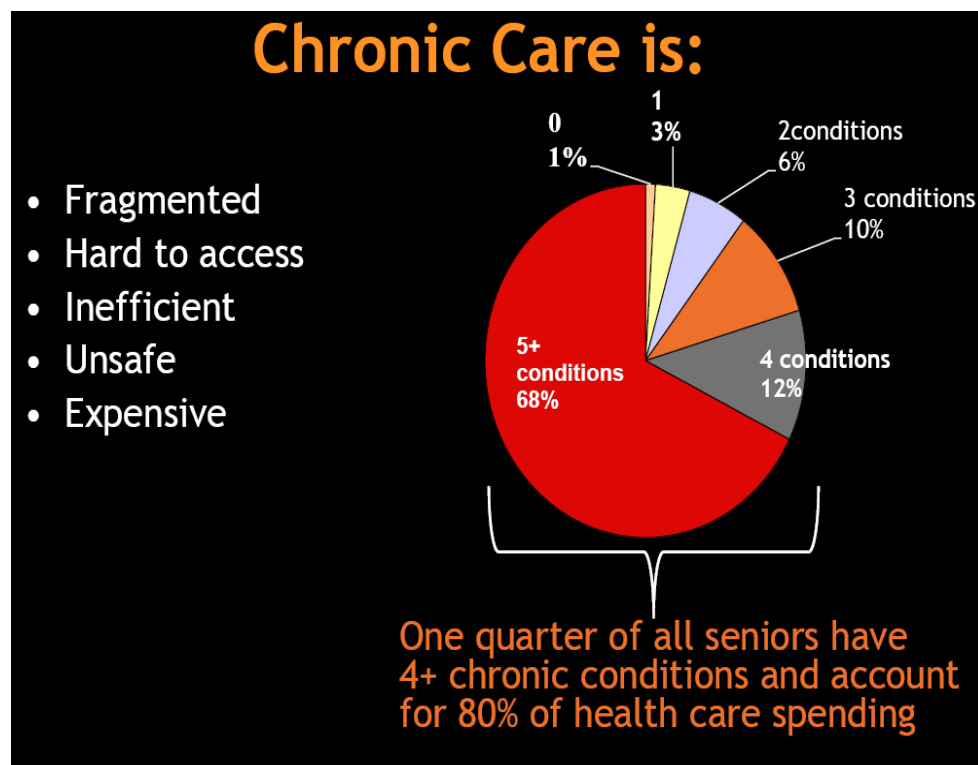
*"Managing High-Risk Patients in ACOs"*

Chad Boulton, MD, MPH, MBA

Professor, Johns Hopkins University

PCPCC ACO Center webinar

February 13, 2012



Source: <http://www.pcpcc.net/files/webinar/boulton-managing-acos-2-13-2012.pdf>

# Chronic Conditions and Care Coordination

- Medicare patients with chronic conditions accounts for 93% of Medicare's fee-for-service expenditures.
- Multiple chronic conditions
  - 1 in 4 Americans
  - 2 of 3 Americans over 65
- Patients often receive care from multiple physicians
  - Failure to coordinate care
  - Receiving duplicative care
  - An increased risk of suffering medical errors.

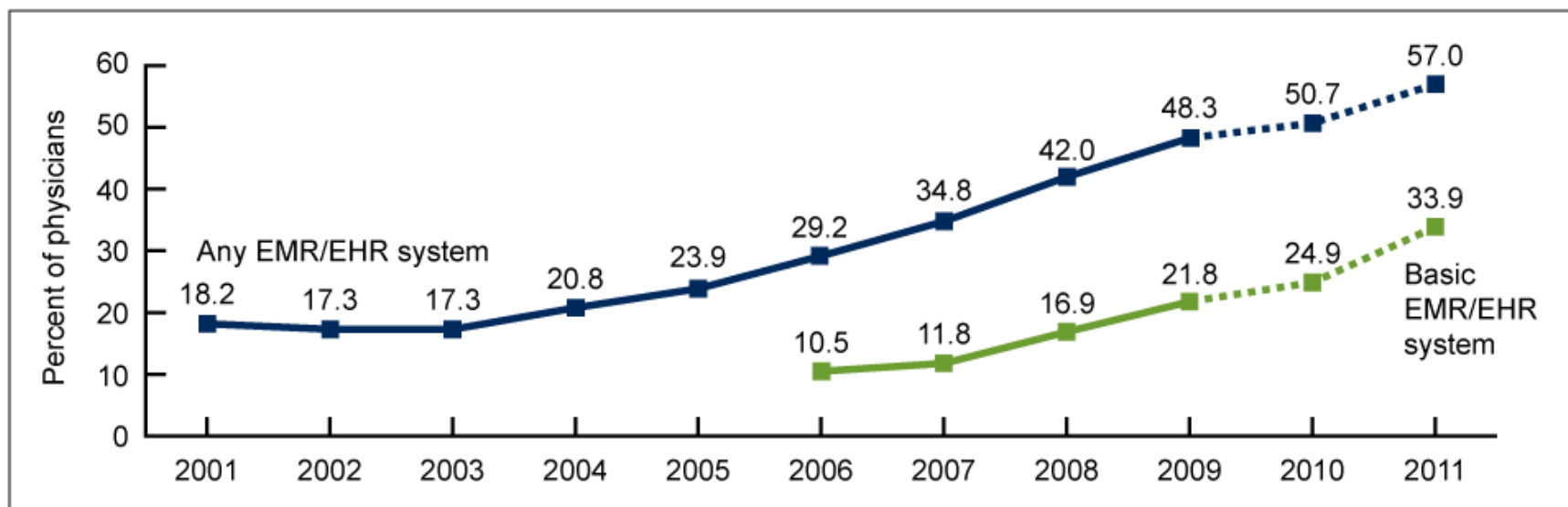
Source: <http://www.healthcare.gov/news/factsheets/2011/03/accountablecare03312011a.html>

# 2009 ARRA / HITECH

- Meaningful Use – 3 stages
  - 15 core measures
  - 5 of 10 menu set
- Certified Electronic Health Record (EHR)
- Medicare \$44K – Medicaid \$63,750

# National EMR/EHR Adoption

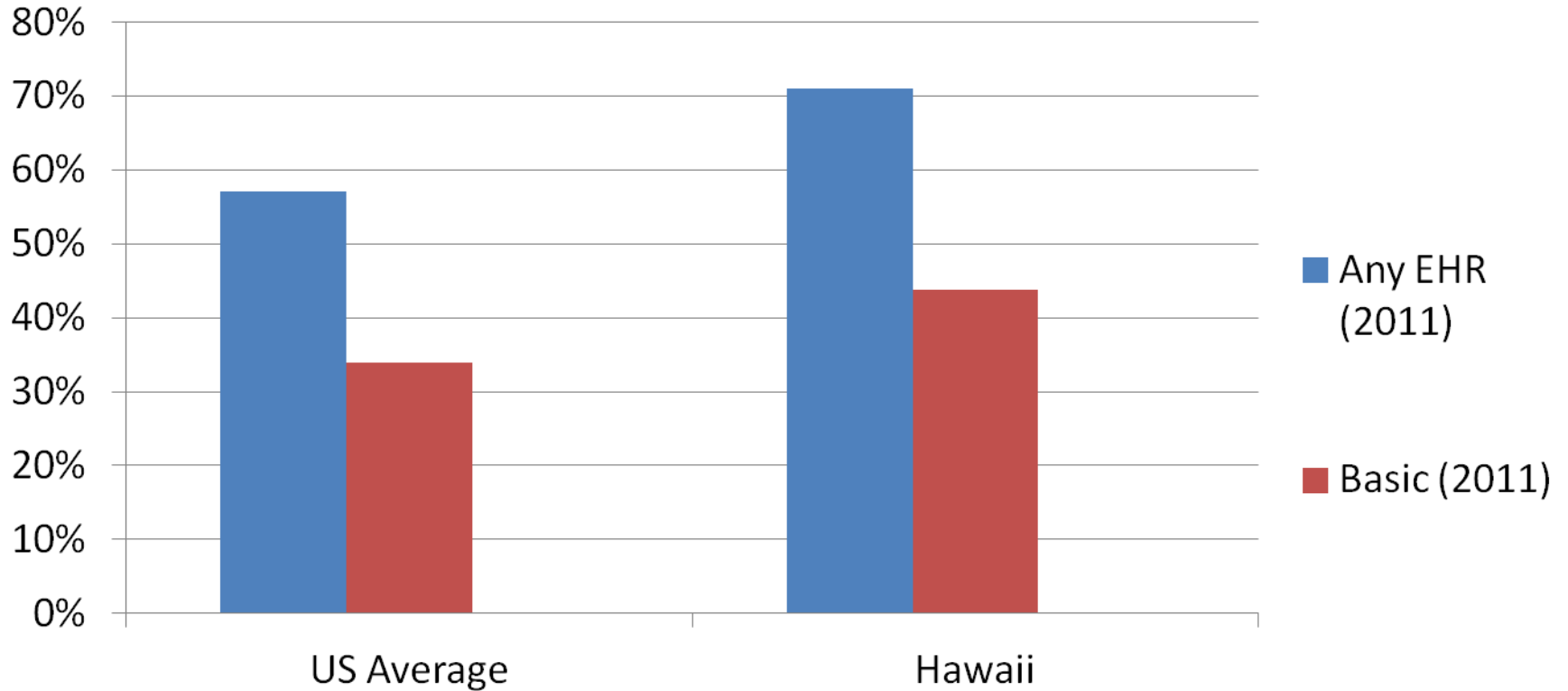
Figure 1. Percentage of office-based physicians with EMR/EHR systems: United States, 2001–2009, and preliminary 2010–2011



NOTES: EMR/EHR is electronic medical record/electronic health record. "Any EMR/EHR system" is a medical or health record system that is all or partially electronic (excluding systems solely for billing). Data for 2001–2007 are from the in-person National Ambulatory Medical Care Survey (NAMCS). Data for 2008–2009 are from combined files (in-person NAMCS and mail survey). Data for 2010–2011 are preliminary estimates (dashed lines) based on the mail survey only. Estimates through 2009 include additional physicians sampled from community health centers. Estimates of basic systems prior to 2006 could not be computed because some items were not collected in the survey. Data include nonfederal, office-based physicians and exclude radiologists, anesthesiologists, and pathologists.

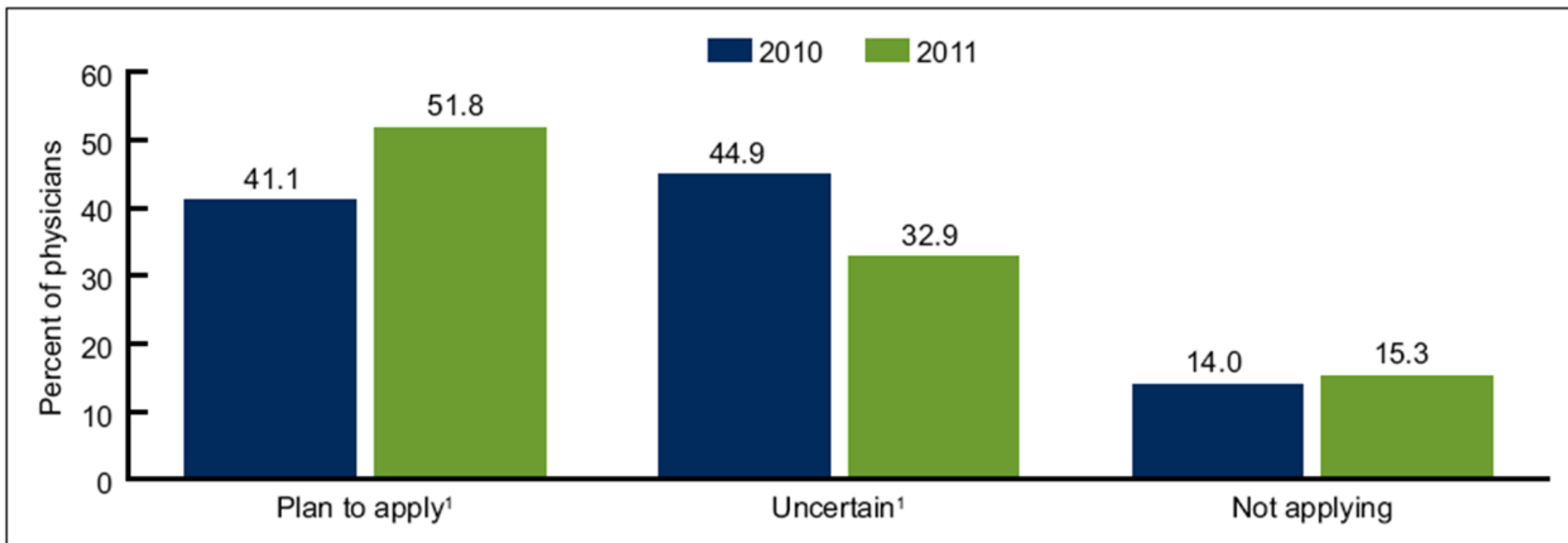
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

# EMR / EHR Adoption



Source: <http://www.cdc.gov/nchs/data/databriefs/db79.htm>

# Planning to Apply for Meaningful Use



¹Differences between 2010 and 2011 percentages are statistically significant ( $p < 0.05$ ).

NOTES: Data are obtained from responses to the question, "Beginning in 2011, Medicare and Medicaid will offer incentives to practices that demonstrate 'meaningful use of Health IT.' At this practice, are there plans to apply for Medicare or Medicaid incentive payments for meaningful use of Health IT?" Data include nonfederal, office-based physicians and exclude radiologists, anesthesiologists, and pathologists.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

# Health Information Technology (HIT)

- Practice Management
- EMR / EHR
- Clinical Decision Support (CDS)
- Population Health Management (PHM)
- Healthcare Informatics / Analytics
- Health Information Exchange – HIE
- Patient Portal

# Effectiveness of Technology in Clinical Environments

- 92% of published articles on health IT found positive effects on quality and efficiency
  - Study by ONC and published in *Health Affairs*
  - 154 articles published from July 2007 to Feb 2010
- Increasing evidence of benefits for all healthcare providers not just early adopters

Source: <http://www.hhs.gov/news/press/2011pres/03/20110308a.html>



# HIT and Clinical Transformation

## Facilitating

- Accountable Care Organization (ACO)
- Patient Centered Medical Home (PCMH)

## Goals

- Reduce cost, new reimbursement models, measure reporting, improve quality & outcomes, increase coordination, proactive care, manage chronic diseases, preventative health, engage patients

# Accountable Care Organizations (ACO)

- Risk Sharing models, value based purchasing (VBP)
- Shared savings and losses
- Creates a new healthcare market
- Market players (Hospitals, IPAs, etc.)
- The role of technology
- The role of PCMH

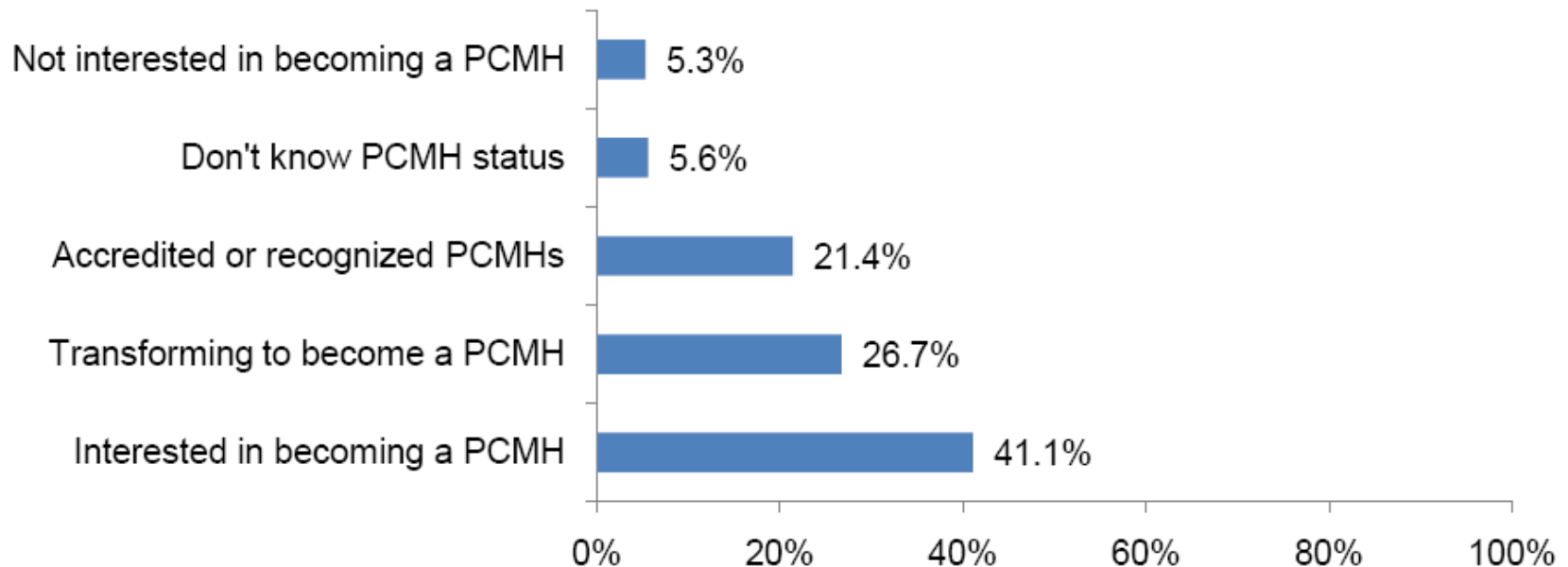
# Nationwide PCMH Successes

- Community Care of North Carolina
  - Medicaid Sponsored PCMH Initiative
  - Cumulative savings of \$974.5 million over 6 years (2003-2008)
  - 40% decrease in hospitalizations for asthma and 16% lower emergency department visit rate
- HealthPartners Medical Group BestCare PCMH Model
  - Integrated Delivery System PCMH Model – Minnesota
  - Between 2004 and 2009
  - 39% decrease in emergency department visits
  - 24% decrease in hospital admissions per enrollee
  - Overall costs for enrollee
  - 100% of state average in 2004
  - 92% of the state average in 2008

Source: [http://www.pcpcc.net/files/evidence\\_outcomes\\_in\\_pcmh.pdf](http://www.pcpcc.net/files/evidence_outcomes_in_pcmh.pdf)

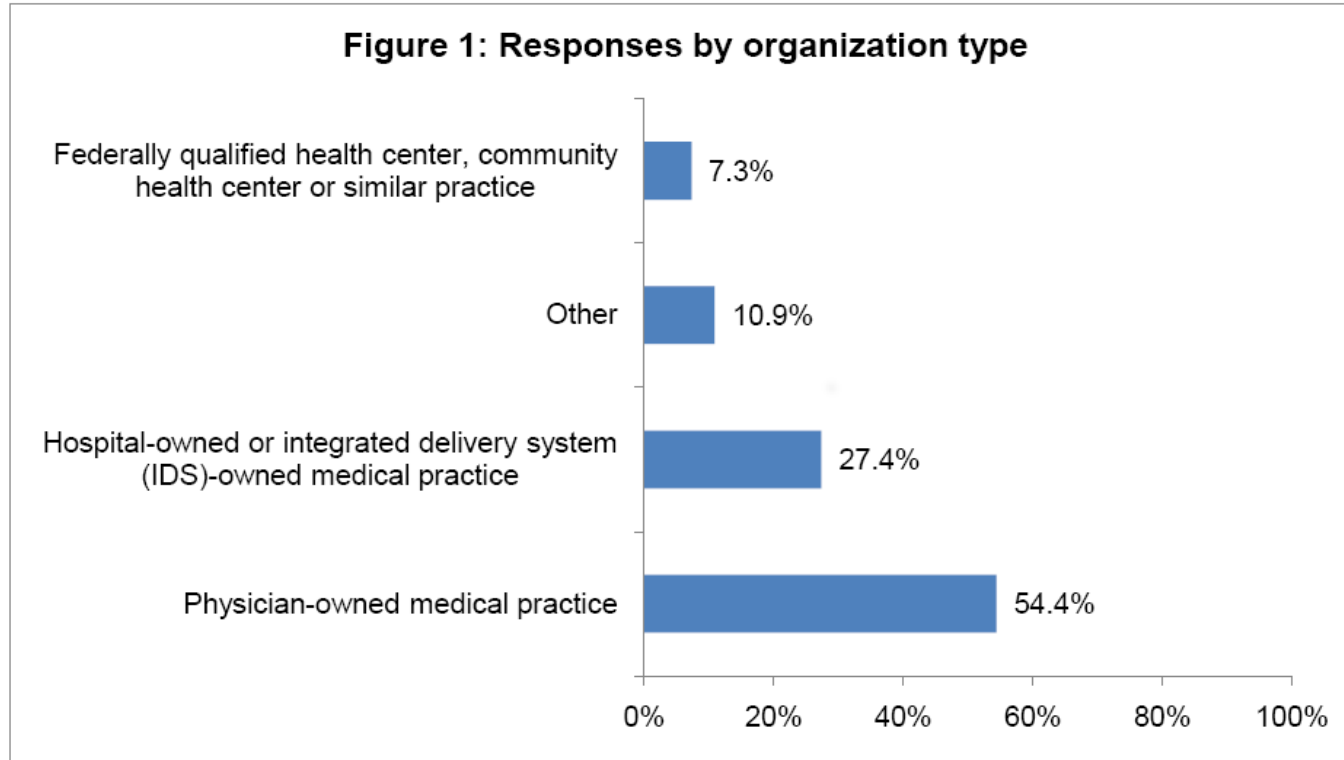
# PCMH status

Figure 2: PCMH status



Source: <http://www.mgma.com/Books/The-Patient-Centered-Medical-Home/>

# Accredited or recognized for PCMH

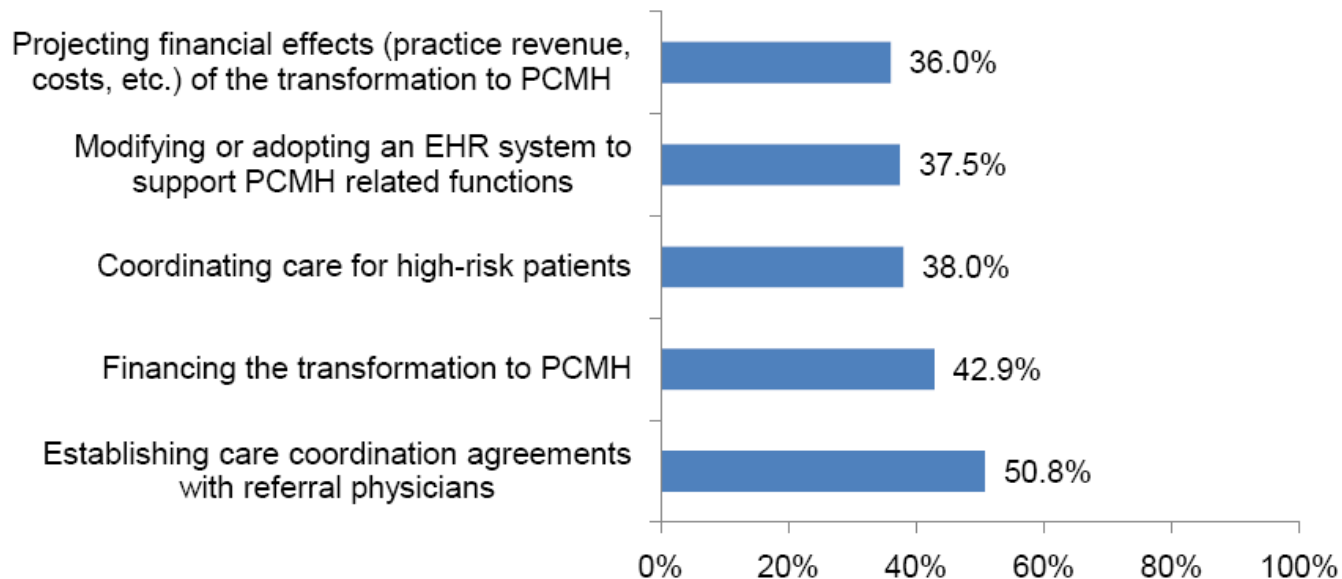


Physician-owned practices represented 53.7 percent of accredited or recognized PCMHs compared to 22.2 percent for hospital-owned medical practices, 14.8 percent for FQHCs and 9.3 percent from other categories with smaller representation. Of those transforming, physician-owned practices reported the highest percentage.

Source: <http://www.mgma.com/Books/The-Patient-Centered-Medical-Home/>

# Top 5 Challenges – PCMH

**Figure 8: Top five challenges faced by accredited or recognized PCMH practices during their transformation to become a PCMH**



Note: The results are based on a 5-point scale where 1 = No challenge at all, 2 = Low challenge, 3 = Moderate challenge, 4 = Considerable challenge, and 5 = Extreme challenge. Challenge percentages represent an aggregation of “considerable” and “extreme challenge” responses.

Source: <http://www.mgma.com/Books/The-Patient-Centered-Medical-Home/>

# Hawaii's Clinical Transformation

- Increased EMR / EHR adoption
- Beacon – Big Island
- HMSA
  - Pay for Quality
  - PCMH
  - Healthways
- HHIE and HPREC
- TeamPraxis - CQS/PHM + Amalga

# CQS – PHM & Qualifying Therapeutic Discovery Projcet



# Qualifying Therapeutic Discovery Project

- Patient Protection and Affordable Care Act of 2010
- Tax credit (2009 / 2010) or grant
- \$1 Billion
- Not more than 250 employees

# TeamPraxis CQS – PHM and Tax Credit

**Award** – over \$244,000

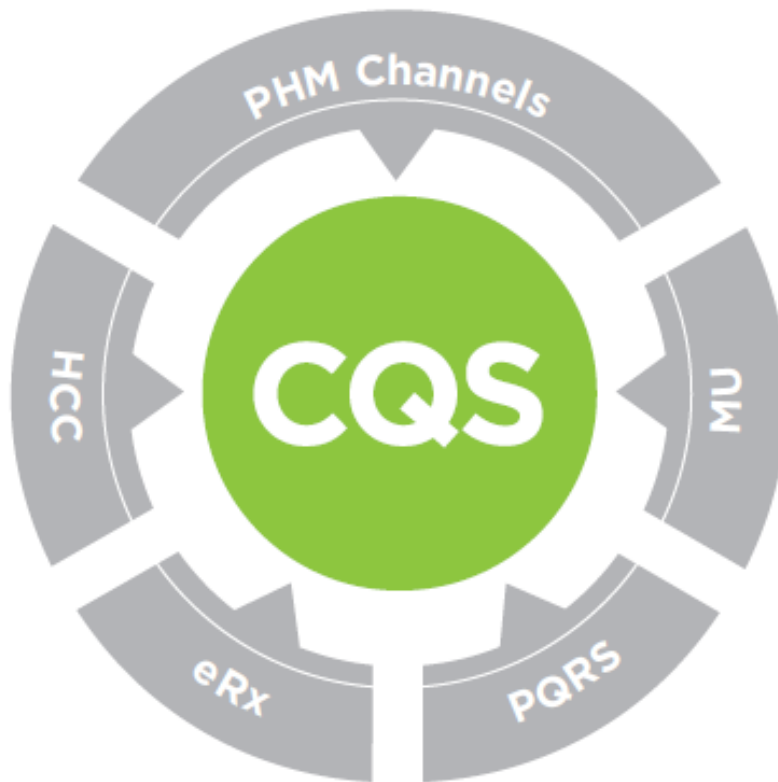
- 2009 ~ \$100,000
- 2010 ~ \$144,000

**Qualifying**

- Software to diagnose disease or condition
- Further delivery / administration of therapeutics
- Reduce long term healthcare costs

# Clinical Quality Solution (CQS)

One Quality Platform with Multiple Channels



## FRAMEWORK

- Rules Driven Framework
- Data Extraction & Warehouse
- Dashboards at the Point of Care



## CHANNELS

- Up-to-date rules
- Algorithm Calculations
- Dashboard content

PHM: Population Health Management; MU: Meaningful Use; PQRS: Physician Quality Reporting System; eRx: e-Prescribing; HCC: HCC Diagnosis Recapture for Medicare Advantage

# Clinical Quality Solution (CQS)

## Nationally



# PHM Channel Focus



## Primary Care



- Diabetes
- Heart Disease
- Asthma
- Prevention

MEDICAL CENTER

NAME CQS AGE       

ADDRESS        DATE       

**Rx**

- Improve outcomes for high priority diseases
- Improve provider efficiency when conducting quality initiatives
- Consistent clinical decision support across care settings



## Patient Dashboard

PHM

CMS

Patient, Johnny Age: 55

View: Selected Measures for Praxis, Joseph

- ▶ Care Actions
- ▶ Health Goals
- ▶ Populations

## Care Actions

Sort by: Importance

⊖	Cardio	Anti-HTN therapy not current	Metoprolol Succinate, 1/18/2011 - 8/16/2011	🔍
⌚	DM	Albumin screening ordered	09/16/2010	🔍
✓	DM	HbA1c up-to-date	6.6 %, 12/8/2011	🔍
✓	Prev	Lipid panel up-to-date	08/24/2011	🔍

## Health Goals

Sort by: Importance

⊖	Prev	BMI not healthy weight and not managed	28.31 kg/m2, 7/22/2011	🔍
⚠	Prev	BP: S $\geq$ 120 and < 140 and/or D $\geq$ 80 and < 90	130 / 85 mmHg, 7/22/2011	🔍
⚠	Prev	LDL is $\geq$ 100 and $\leq$ 130	115 mg/dL, 8/24/2011	🔍
✓	DM	HbA1c < 7	6.6 %, 12/8/2011	🔍

## Populations

- ⊕ \*Hypertension\*
- ⊕ \*Diabetes\*

- ✓ Good
- ⚠ Warning
- ⊖ Attention Needed
- Missing Data
- 🚫 Exclusion
- ⌚ In Progress

Print

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# PHM Focus - Diseases and Measures

- **Process Measures** - “Care Actions” actions providers can take to improve their patients’ health
- **Goal Measures** - “Health Goals” show health status of patient

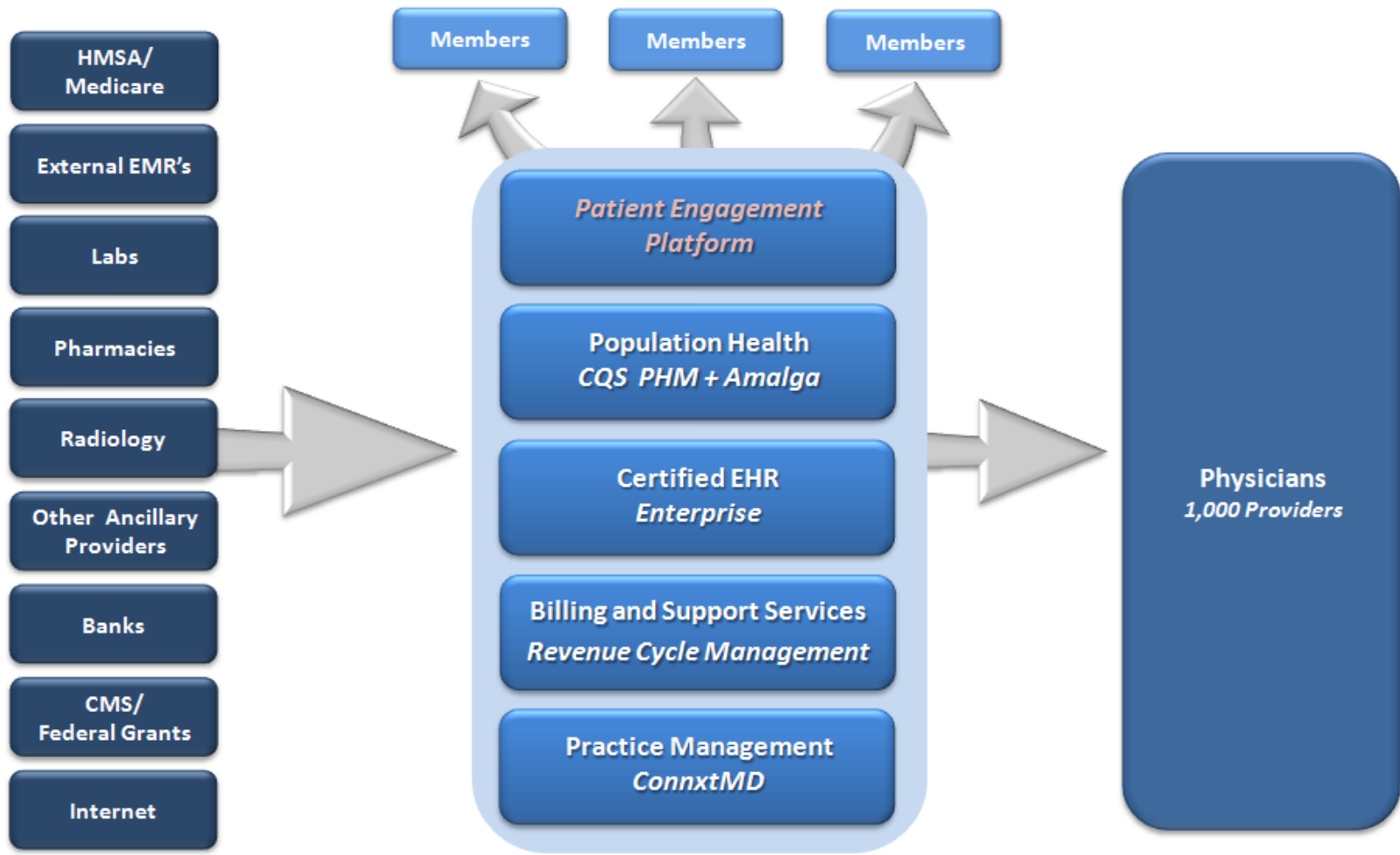
CONDITION/GENRE	TOTAL MEASURES	GOAL MEASURES	GOAL TARGET LEVELS
Diabetes	5	1	3
Heart Disease (HTN*, CHF, CAD, MI, IVD)	9	0	0
Asthma	2	1	3
Prevention	16	5	15
Total	32	7	21

# Microsoft Amalga

- TeamPraxis developed partnership in early 2011
- Integrated CQS – PHM + Amalga to create an incredibly powerful Population Health Management platform
- Currently installed for 15 physicians in Hawaii



# Comprehensive Health IT stack



# Hawaii's Independent Physicians

# Delivery of care by independent physician

Practice Type	Percentage
Solo / 2 Physician practice	32%
3 to 5 physician - Group practice	15%
6 to 50 physician - Group practice	19%
Hospital-Based	13%
Medical School / University	7%

Source: Center for Studying Health System Change. 2008 Health Tracking Study Physician Survey. Sept. 2009

# Independent Physician Challenges

*Unique challenges for Independent Physicians as a...*

*...Business Person*



*...Care Provider*



# Hawaii's Independent physicians Meaningful Use successes

- 40 attest in 2011
- 27 TeamPraxis physicians attest in 2011
  - **all have received there \$18,000 checks**
- Currently over 40 TeamPraxis physicians in 90 day attestation period
- Over 150 TeamPraxis physicians to complete attestation by the end of 2012

# Collaborative PCMH pilot

2010 to 2012

- Queens Medical Center
- TeamPraxis
- Healthways
- 24 Independent physicians
- HMSA

# PCMH Clinical Success

**Goal:** Determine and monitor the percentage of my diabetic population that is poorly controlled and compare that percentage to national and local standards.

**Standards:**

- Best in nation = approx. 6%
- HMSA PPO: approx. 40%
- HMSA Medicaid: approx. 50%

# PCMH Clinical Success

- **Denominator definition:** diabetic patients ages 18 to 75
- **Numerator definition:** diabetic patients with an A1C > 9.0 plus diabetic patients with no A1C result in one year
- **Patients excluded denominator/numerator:**
  - have died/left the practice
  - > 75 years of age



# PCMH Clinical Success

	Doctor #1	Doctor #2	Doctor #3	Doctor #4
Denominator (after exclusions)	137	117	46	140
Numerator (A1C > 9.0/no A1C)	34	13	5	9
% of population poorly controlled	24.8%	11.1%	10.8%	5.7%

## Standards

Best in nation = approx. 6%

HMSA PPO: approx. 40%

HMSA Medicaid: approx. 50%

# Independent Physicians and Clinical Transformation

## Challenges

- Business sustainability
- New reimbursement & care models
- Participant & coordination agreements
- Leveraging and adapting to technology

## Opportunities

- New revenue streams
- Cost reduction & improved care
- Funding

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